

### Fig. 1

### NL1:

GG	CT(	CCT	CAT	CTG	GAP	CAC	CTC	GG	STC.	ACC	CCC	CGA	ACP	ACC	GT	GG	TG	GGA	GGG	AGA	.GC	GG	GC	60	
			TCC																					120	
			GCC																					180	
AC		CCA	1900	GGG	11.00	<i>-</i> 100	Cric							I					G	N		Ç		12	
						- *	2000	3 D. C.			•							AGF	ACG0	GC	rgg	T(	CC	240	
T(	3GG	ТТТ	GCC	CCF	₹¥1.(	GACC														;G				32	
	W	V	С	P	N	D	R	_	L									Q		. –					
Gʻ	rgc	ACA	CCT	ACC	CAG.	ACG(	3AGA	\AG	CAG	SAG	GAG	GA	AG	CAG	CAC	CC'	TCA	GC(	CCG(	3CG(	ĿΑĿ	iG'	ľĠ	300	
	V	Н	Т	Y	Q	T	Ė	K	Q	R		R	K	Q	Н	[	L	S	P	A	E		V	52	
G.	AGG	GCC/	ATCC	CTG	CAG	GTC	ATC	CAG	AGG	GC.	AGA	\GC	GG	CTC	GA	CG	TCC	TG(	GAG	CAG	CAC	ξA	GA	360	
	E	A	I	L	Q	V	I	Q	R	A	<b>Y</b>	E	R	L	Ľ	)	٧	L	E	Q	Q	!	R	72	
Д	ጥርር	3GG	CGG(	СТG	GTG	GAG	CGG	СТО	3GA(	GAC	CAT	'GA	.GG	CGG	AA:	ТG	TGA	ЯΤG	GGG:	AAC	GG	CC	TG	420	
4 1	т	G	R	L	V	E	R	L	E			M	R	R	1		V	M	G	N			L	92	
ď	· ·	_	TGT		· ርጥር	ጉጥርር	:GGG	GAG	GGT	GCT	'GG(	3CI	TC	CTC	3GG	CP	\GCʻ	rcg	тсс	GTG	TT	CI	GC.	<b>4=</b> 80	
1					_	_	G	E			Ĺ	G	F	L		G	S	S	S	V			С	- 112	
	S	Q	С	L						•	_	_			<u>ጉ</u> ሙጥ	ירח	רמר	מממ	GGG	ነርጥር	CC	СF	٩AG	´. 540	
P	AA	GAC	TGC.	AGG	AA(	3GTC	УŢGG	AA	GAG	GT.C	יטטל	التال	JU(	. I G(						,					
	K	D	С	R			M	K			S	G	A			F	Y	K		Ţ		2	K	132	
ſ	TAT	TA	CTTG	CC	CCT	GAA	GACC	CCC	TGG	GCC(	GAG	CT	GΑΊ	rga	GCC	CC	CAG	ттс	CCGF	ACC:	rTG	G	CCC	600	
	Y	I	L	Р	L	K	Т	P	•	G	R	A	D	E		P	Q	F	`R	I	? ?	M	P	152	
	ACG	GA/	ACCG	:GC	AGA	GCG	AGA(	GCC	CAC	SAA	GCT	CT	GΑ	GAC	CAC	GC	CGC	TAC	CTA	CAC	GTC	G	GCC	660	
	Т	E	P	P	A E	R	E	E	?	R	S	S	E	Т	•	s	R	I	Y	·	Γ	W	А	172	
	_		AAG <i>I</i>	ንርጥ የ	GGT	·ጥጥC	CAG'	TG <i>F</i>	\CA(	ЭTG	ACP	\GT	GΑ	CTC	:GG/	ΤA	CTI	AG	CTC	CTC	CAG	GC	СТА	720	)
					/ \				)					) S					s s	`		S		192	<b>)</b>
				·	•	,				_	_								ACC	ርጥር	GAZ	46	GAG	780	)
	GA	GGA	.CAG	ACT	CCC	CATC	CAC	'I'G(																212	>
		_	) R		L		•	Γ (						R I					K E				Ε		
	TC	AGG	TGG	CAG	GCG	rgga	AGGC	CC	CCA	GGP	ATG(	GGG	TT	CAC	CCC	A.F	ACC(	CGC	GGG	CCP	(CC	TC	TTTT	840	נ
		_			<u> </u>	1 T	,	n	Ð	Ð	М	G	·	F '	יו	0	P		A (	3	Н	L	·F	232	2

GGGT'	TG	CAGA	.GCP	\GC(	CTGG	GCC <i>I</i>	AGTG	GTO	GAGA	CGG	GC/	ACAG	GC1	CTG	CTC	SACC	CGC	CAG	GG	900
G	L	Q	S	S	L	A	S	G	E	Т	G	T	G	S	А	D	P	P	. <b>G</b>	2,52
GGAG	GG	ACAG	GCI	CT	GCTC	GAC(	CCGC	CAC	GGGG	GAC	CCC	CGCC	CCC	GGC	TGF	ACCC	GAA	.GGG	GCC	960
G	G	Т	G	s	A	D	P	P	G	G	P	R	P	G	L	T	R	R	А	272
CCGG	TA	AAAG	SACA	ACA(	CCT	GGA(	CGAG	GC(	CCCG	CTC	GCT(	GACG	GCAC	GCTC	CCAC	GCAG	GCC	CCI	rcc	1020
Р	V	К	D	Т	P	G	R	A	Р	A	A	D	A	A	Р	A	G	P	S	292
AGCT	GC	CTGG	GCT	ΓGA	GGT	GTC'	TGGI	GC(	CTGG	AAC	CAG	ACTI	CCC	CTGI	rgg <i>i</i>	\GGA	ATTC	СТС	GCC	1080
S	С	L	G	*													ĵ			296
AGAC	:CC	TGCC	CCG	GCT	CCT	CCC'	TGAC	CCG	GTCC	TTC	3TG	CCCI	CA	CCAC	3AC	ACCC	CTGT	ТG	GCC	1140
ATGA	CT	CAAC	CAAZ	ACC.	AGT(	GTT(	GGGF	\GC	CGTC	TGC	CCT	ccc	CAG	CTCF	AGTO	GCCI	TTC	CTGC	CAC	1200
CCCT	'TC	TCTC	CCT	GGG	GAG	CTG	TCTO	GCA:	TCCG	GC?	ACC	CCCI	rcci	AAC(	CAC	rgco	CCTC	CAG	CCC	1260
CCGA	'CC	TTAT	rtti	TTA	ACC	CTC	CCC	rcc	CACA	ACC(	ccc	AAT	СТА	CCT	GGT	GAT(	GAT'	TTT.	AAG	1320
TTTG	CG	CGT	3TC'	ТТG	GGT'	TGG	GCT	GGG	GGG1	TTT	CCC	'ACA'	rgc.	AGT	GTC.	AGA	GGG	GCC	GCC	1380
CGGT	'GG	GGCT	rat)	CTC	CGT	TGC	TAT	ΥTP	AATO	GC.	AAG	ACT	AAA	TGA	AAC	CTA	GGG	CAC	GGC	1440
CTCC	GA	AGCI	rgc	GTG	TGG	ccc	CTT	AGA	GGT	3AG	CAT	CAG	AGC	CAG	AGC	AGT(	GAG	GGG	GAG	1500
ACTO	CAC	CCA	CCC'	TCT	CCC	ТСТ	'CCC'	ГТС	AGCI	rcT(	GGG	AGG	CAG	GCG	CAG	TGC	CCC	CCT	CCC	1.560
ATGG	GC	TGG	CCC.	AGG	ACC	GCG	GGT	GAA	ACC	rgg	GTC	TGT'	ГТА	GTT'	TCT	TTG	GTT'	ТТТ	GTA	1620
TGTT	TG	TTT	GTT'	TTT	'GAC	ACA	.GTC'	rcg	CTTT	rgt'	TGC	CCA	GGC	TGG	GGT	GCA(	GTG(	GCA	.CGA	1680
TCGC	CGG	CTC	ACT	GCA	ACC	TCC	'ACC'	TCC	CGGC	3CT	CAA	.GCG	ATT	CTC'	TCA	CCT	CAG	CCT	CCT	1740
GAGT	`AG	GTG	GGA <sup>°</sup>	TTA	CAG	ATG	CCC	GCC	ACC	ACA	ccc	'AGT'	ГAA	ттт'	TTG	TAT'	TTT'	TAG	AAG	1800
AGAT	'GG	GGT	TTC'	TCC	ATG	ТТG	GCC2	AGG	CTG	3TC	ТТС	AAC'	TCC	TGG'	TCT	CAA	GTG.	ATC	CGC	1860
CCGC	CCT	'CGG(	CCT	CCC	AAA	GTG	CTG	GGA	ATTA	CAG	GTG	TGA	GCC	ACC	GCA	.CCC	AAT	CCT	ATT	1920
AGGT	TTT	СТТ	TGA	ATC	ccc	TCA	TGG	CCT	'GCC'	rgg	ттт	TTG	CTC	AGC	CTG	TCT'	TCA	GCT	TGA	1980
GGAG	GCT	'GGG	AAG	CTC	CTGG	TGG	SATG	CTA	ATGA/	ACT	CAC	TTG	CTG	AAG.	AGC	AGC	GTT	CAG	GTG	2040
CATO	CCC	CAG	CCA	.GGG	GCAC	GTG	GCT	CCC	CTCA	GCC	ATG	SAAT'	TCA	СТТ	CTC	TTC	AGG.	AGG	TTT	2100
GGC'I	rre	GCA'	ТGА	AAA	ATAC	TTC	TTAC	CAG	SAGT	ATG	GGC	AAA	TGC	ттс	TGG	AAA	ACC	CTT	CCC	2160
TGA	AG₽	AGAG.	AGA	ACG	STGT	'GTC	STGT	GTG	STCG(	GTG	ATC	CACA	ccc	TCC	CAT	CCT	TCC	TGC	CTC	2220
CTG	CCC	CAA	ACC	CCC	GGT	TCC	CTGG	GTC	CTGG	AAG	GGC	CTT	CTC	TCC	AAG	CTG	GGA	GCT	CCT	2280

Fig. 2	
CCTGTGGCACGTTATGCTTCAGAATTAAAACAATGAAGATTAAAA 2	2385
GGGCCCCACCATTCACTTTTTGTCCTTGCTGCTGGCAAACAGTAAAGAAACTCACTTTC 2	2340

60

### CL1:

CTC	CTC	CTC	CCT	'GGT	GGG	GCC	TGT	CTG	GGI	'GA	\GCC	CCT	'CTG	TTC	CCG	AGG	SATC	GTC	CCA	120
ACC	CCC	AGC	CGG	GTG	CTC	CGA	GCC	ATG	GCC	GAC	CACC	ÅTC	TTC	GGC	CAGC	GGĢ	AAT	GAT	CAG	180
								М	A	D	T	I	F	G	S	G	N	D	Q	12
TGG	3TT'	rgc	ccc	AAT	GAC	CGG	CAG	СТТ	GCC	СТТ	CGA	.GCC	AAG	CTG	CAG	ACG	GGC	TGG	TCC	240
W	V	С	P	N	D	R	Q	L	А	L	R	A	K	L	Q	T	G	W	S	32
GTG	CAC	ACC	TAC	CAG	ACG	GAG.	AAG	CAG	AGG	AGG	AAG	CAG	CAC	CTC	AGC	CCG	GCG	GAG	GTG	300
V	Н	T	Y	Q	Т	E	K	Q	R	R	K	Q	Н	L	S	P	А	E	V	52
GAG	GCC2	ATC	СТG	CAG	GTC	ATC	CAG.	AGG	GCA	GAG	GCGG	CTC	GAC	GTC	CTG	GAG	CAG	CAG	AGA	360
E	A	Ι	L	Q	V	I	Q	R	A	E	R	L	D	V	L	Е	Q	Q	R	- 72
ATC	3GG(	CGG	CTG	GTG	GAG	CGG	CTG	GAG.	ACC	ATC	AGG	CGG	AAT	GTG	ATG	GGG	AAC	GGC(	CTG.	420
I	G	R	L	V	E	R	L	E	Т	М	R	R	N	V	М	G	N	G	Ĺ	92
TCC	CAGʻ	rgt	CTG	CTC	TGC	GGG	GAG	GTG	СТG	GGC	TTC	CTG	GGC.	AGC	TCG	TCG	GTG'	TTC'	rgc	480
S	Q	С	L	L	С	G	E	V	L	G	F	L	G	s	S	S	V	F	С	112
AAA	3ACʻ	rgc	AGG	AAG	AAA	.GTC	TGC.	ACC.	AAA	TGT	'GGG	ATC	GAG	GCC	TCC	CCT	GGC	CAG	<b>A</b> AG	540
K	D	С	R	К	K	V	С	T	K	С	G	I	Ε	A	S	P	G	Q	K	132
CGG	CCC	CTG	TGG	CTG	TGT	AAG	ATC	TGC	AGT	GAG	CAA	AGA	GAG	GTC	TGG	AAG	AGGʻ	rcg	GGG	600
R	P	L	W	L	С	К	I	С	S	E	Q	R	Ε	V	W	K	R	S	G	152
GCC	rggʻ	ГТС	TAC	AAA	GGG	CTC	CCC.	AAG	TAT	ATC	TTG	ccc	CTG	AAG	ACC	CCT	GGC	CGA	GCT	660
A	W	F	Y	K	G	L	P	K	Y	I	L	Ρ	L	K	T	Р	G	R	А	172
GAT(	GAC	CCC	CAC	TTC	CGA	CCT'	ТТG	CCC	ACG	GAA	CCG	GCA	GAG	CGA	.GAG	ccc	AGA	AGC	rct	720
D	ח	P	н	F	Ŕ	P	Τ.	Þ	т	F	Þ	Δ	r	D	r	D	D	c	S	192

GAGA	ACC	AGC	CGC	ATC'	TAC	ACG	rgge	CCC	CGA	GGAF	\GA(	GTGG	TTT	rcc.	AGT(	GAC	AGT	GACA	AGT	780
E	T	S	R	I	Y	Т	W	A	R	G	R	٧	V	S	S	D	S	D	S	212
GACT	°CG(	GAT	CTTA	AGC'	TCCI	rcci	AGCC	TAC	SAG	GACA	\GA(	CTCC	CAT	rcc.	ACTO	GGG(	GTC	AGG(	GAC	840
D	S	D	L	S	S	S	S	L	E	D	R	L	P	S	T	G	V	R	D	232
CGG	AA)	GGC	GAC	AAA	CCCI	rgg/	AAGG	AGT	CA	GGT	GC?	AGC6	TGC	SAG	GCC	CCC	AGG	ATG(	GGG	900
R	K	G	D	K	P	W	K	Ε	S	G	G	S	٧	Ε	A	P	R	М	G	252
TTC	ACC(	CAA	.CCC	GCG	GGC	CAC	CTCI	TTC	3GG	TTGO	CAG	AGCA	\GC(	CTG	GCC?	AGT(	GGT(	GAG?	ACG	960
F	T	Q	P	A	G	Н	L	F	G	L	Q	S	S	L	A	s '	G	E	Т	272
GGC?	ACA	GGC	TCT	GCT	GAC	CCG	CCAG	GGG	3GA	GGG	ACA	GGCI	CTO	GCT	GAC	CCG	CCA	GGG	GGA	1020
G	T	G	S	A	D	P	P	G	G	G	T	G	S	A	D	P	P	G	G	292
CCC	CGC	CCC	GGG	CTG	ACC	CGA	AGGG	GCC	CCG	GTAA	AAA	GACA	ACA	CCT	GGA	CGA	GCC	ccc	GCT	1080
Р	R	Р	G	L	Т	R	R	A	P	V	K	D	Т	Р	G	R	А	P	A	312
GCT	GAC	GCA	GCT	CCA	.GCA	GGC	CCCI	CC	4GC	TGC	CTG	GGCI	'GA(	GGT	GTC'	ľGG'	TGC	CTG	GAA	1140
Α	D	A	А	P	A	G	P	S	S	С	L	G	*							325
CAG	АСТ	TCC	CTG'	TGG	AGG	TTP	CCT	GCC?	٩GА	.CCC	rgc	CCGG	GCT(	CCT	CCC'	rga(	CCG	GTC	CTT	, <b>1</b> 200
GTG	CCC'	TCA	CCA	GAC	ACC	CTG'	TTGO	GCC/	AТG	ACT	CAA	CAAA	ACC	AGT	GTT	GGG	AGC	CGT	CTG?	1260
CCT	CCC	CAG	CTC	AGT	GCC'	гтт	CTG	CAC	ccc	TTC'	гст	CCT	3GG(	GAG	CTG	ТСТ	GCA	TCC	GCC	1320
ACC	CCC	TCC	AAC	CAC	TGC	CCT	CAGO	CCC	CCG	ACC'	TTA	TTTA	TTA	ACC	CTC	CCC	TCC	CAC.	ACC	1380
CCC	\AT	CTA	CCT	GGT	GAT(	GAT'	TTTA	\AGʻ	ГТТ	'GCG	CGT	GTC	rtg	GGT	TGG	GCT	GGG	GGG	TTT	1440
CCC	ACA	TGC	AGT	GTC	AGA	GGG	GCC	GCC	CGG	TGG	GGC	TATO	CTC	CGT	TGC	TAT	АТТ	AAT	GGC	1500
AAG	ACT.	AAA	TGA	AAC	CTA	GGG	CAC	GC(	CTC	CGA	AGC	TGC	3TG'	TGG	CCC	CTT	AGA	GGT	GAG	1560
CAT	CAG	AGC	CAG	AGC	AGT	GAG	GGG	GAG.	ACT	'CAC	CCA	CCC	CT	CCC	TCT	ccc	TTC	AGC	TCT	1620
GGG	AGG	CAG	GCG	CAG	TGC	CCC	CCT	CCC	ATG	GGC'	TGG	CCC	AGG.	ACC	GCG	GGT	'GAA	ACC	TGG	1680
GTC'	rgt	TTA	\GTT	TCT	'TTG	GTT	TTT	GTA'	TGT	TTG	ТТТ	GTT'	ГТТ	GAC	CACA	GTC	TCG	CTT	TGT	1740
TGC	CCA	GGC	TGG	GGT	'GCA	GTG	GCA	CGA	TCC	GCGG	CTC	ACT(	GCA	ACC	CTCC	ACC	TCC	CGG	GCT	1800
CAA	GCG	PLL	CTC	TCA	CCT	CAG	CCT	CCT	GAG	STAG	GTG	GGA	ГТА	CAG	SATG	ccc	GCC	ACC	ACA	1860
CCC	AGT	TAF	TTT	ፐፕሮ	TAT'	ттт	TAG	AAG.	AGA	ЧTGG	GGT	ттс	rcc	ATG	STTG	GCC	AGG	CTG	GTC	1920
ТТG	AAC	TCC	CTGG	TCT	CAA	GTG	ATC	CGC	CCG	CCT	CGG	CCT	ccc	AAA	AGTG	CTG	GGA	ATTA	CAG	1980

TTTTTGCTCAGCCTGTCTTCAGCTTGAGGAGCTGGGAAGCTCTGGTGGATGCTATGAACT 2100 2160 2220 2280 ATCACACCCTCCCATCCTTCCTGCCTCCTGCCCCAAACCCCGGGTTCCTGGGTCTGGAAG 2340 GGCCTTCTCTCCAAGCTGGGAGCTCCTGGGCCCCCACCATTCACTTTTTGTCCTTGCTGC 2400 TGGCAAACAGTAAAGAAACTCACTTTCCCTGTGGCACGTTATGCTTCAGAÁTTAAAACAA TGAAGATTAAAA 2472

Fig.3

### CL2:

60  $\verb|CTCCTCCTGGTGGGGCCTGTCTGGGTGAAGCCCCTCTGTTCCCGAGGATCGTCCCA||$ 120 ACCCCAGCCGGGTGCTCCGAGCCATGGCCGACACCATCTTCGGCAGCGGGAATGATCAG \_ 180 240 GAACAGGACCAACACAGTCCCTGGTCTTAAAGCACAGGTGGGCAGAGGCTGCAGACGGGC 300 TGGTCGGTGCACACCTACCAGACGGAGAAGCAGAGGAGGAAGCAGCACCTCAGCCCGGCG 360 GAGGTGGAGGCCATCCTGCAGGTCATCCAGAGGGCAGAGCGGCTCGACGTCCTGGAGCAG 420 CAGAGAATCGGGCGGCTGGAGCCGCTGGAGACCATGAGGCGGAATGTGATGGGGAAC 480 8 R R N V M G N Μ GGCCTGTCCCAGTGTCTGCTGCGGGGAGGTGCTGGGCTTCCTGGGCAGCTCGTCGGTG 540 28 V G E V L G F L G S S CLLC TTCTGCAAAGACTGCAGGAAGAAAGTCTGCACCAAATGTGGGATCGAGGCCTCCCCTGGC 600 48 A S P G V C T K C GIE K K CKD CRCAGAAGCGGCCCCTGTGGCTGTAAGATCTGCAGTGAGCAAAGAGAGGTCTGGAAGAGG 660 68 KRP LW LC KIC S E QRE K R

TCGGGGGCCTGGTTCTACAAAGGGCTCCCCAAGTATATCTTGCCCCTGAAGACCCCTGGC 720 K Y Ι L W K G Ρ G 88 K CGAGCTGATGACCCCCACTTCCGACCTTTGCCCACGGAACCGGCAGAGCGAGAGCCCAGA 780 E R D D Η R ŘΕ R 108 AGCTCTGAGACCAGCCGCATCTACACGTGGGCCCGAGGAAGAGTGGTTTCCAGTGACAGT 840 R IY W A R G R 128 GACAGTGACTCGGATCTTAGCTCCTCCAGCCTAGAGGACAGACTCCCATCCACTGGGGTC 900 R D D S L E D Р 148 AGGGACCGGAAAGGCGACAAACCCTGGAAGGAGTCAGGTGGCAGCGTGGAGGCCCCCAGG 960 D W K E S G 168 K G ATGGGGTTCACCCAACCCGCGGGCCACCTCTTTGGGTTGCAGAGCAGCCTGGCCAGTGGT 1020 O P A G HLF G L 0 S S 188 208 A D S A D G G G S GGGGGACCCCGCCCCGGGCTGACCCGAAGGCCCCCGGTAAAAGACACACCTGGACGAGCC / 1140 G R Α R 228 G R G T R P K G CCCGCTGCTGACGCAGCTCCAGCAGGCCCCTCCAGCTGCCTGGGCTGAGGTGTCTGGTGC 1200 S C L G \* A A P A G P S 243 AAD CTGGAACAGACTTCCCTGTGGAGGATTCCTGCCAGACCCTGCCCGGCTCCTCCCTGACCG 1260 GTCCTTGTGCCCTCACCAGACACCCTGTTGGCCATGACTCAACAAACCAGTGTTGGGAGC 1320 CGTCTGCCTCCCCAGCTCAGTGCCTTTCTGCACCCCTTCTCTCTGGGGAGCTGTCTGCA 1380 1440 CACACCCCAATCTACCTGGTGATGATTTTAAGTTTGCGCGTGTCTTGGGTTGGGCTGGG 1500 GGGTTTCCCACATGCAGTGTCAGAGGGGCCGCCCGGTGGGGCTATCTCCGTTGCTATATT 1560 AATGGCAAGACTAAATGAAACCTAGGGCACGGCCTCCGAAGCTGCGTGTGGCCCCTTAGA 1620 AGCTCTGGGAGGCAGGCGCAGTGCCCCCCTCCCATGGGCTGGCCCAGGACCGCGGGTGAA 1740

1800 CTTTGTTGCCCAGGCTGGGGTGCAGTGGCACGATCGCGGCTCACTGCAACCTCCACCTCC 1860 CGGGCTCAAGCGATTCTCTCACCTCAGCCTCCTGAGTAGGTGGGATTACAGATGCCCGCC 1920 ACCACACCCAGTTAATTTTTGTATTTTTAGAAGAGATGGGGTTTCTCCATGTTGGCCAGG 1980 CTGGTCTTGAACTCCTGGTCTCAAGTGATCCGCCCGCCTCGGCCTCCCAAAGTGCTGGGA 2040 TTACAGGTGTGAGCCACCGCACCCAATCCTATTAGGTTTCTTTGAATCCCCTCATGGCCT 2100 GCCTGGTTTTTGCTCAGCCTGTCTTCAGCTTGAGGAGCTGGGAAGCTCTGGTGGATGCTA 2160 2220 2280 2340 2400 TCGGTGATCACACCCTCCCATCCTTCCTGCCTCCTGCCCCAAACCCCGGGTTCCTGGGTC 2460 TGGAAGGGCCTTCTCCCAAGCTGGGAGCTCCTGGGCCCCCACCATTCACTTTTTGTCCT TGCTGCTGGCAAACAGTAAAGAAACTCACTTTCCCTGTGGCACGTTATGCTTCAGAATTA 2520 2538 AAACAATGAAGATTAAAA

### Fig. 4

### CL3:

60 CTCCTCCTGGTGGGGCCTGTCTGGGTGAAGCCCCTCTGTTCCCGAGGATCGTCCCA 120 ACCCCAGCCGGGTGCTCCGAGCCATGGCCGACACCATCTTCGGCAGCGGGAATGATCAG 180 12 ADTIFGS GNDO TGGGTTTGCCCCAATGACCGGCAGCTTGCCCTTCGAGCCAAGCTGCAGACGGGCTGGTCC 240 32 N D R Q L A L R A K L O T G W S 300 GTGCACACCTACCAGACGGAGAAGCAGGAGGAAGCAGCACCTCAGCCCGGCGAGGTG 52 V H T Y O T E K O R R K Q H L S P A E V GAGGCCATCCTGCAGGTCATCCAGAGGGCAGAGCGCTCGACGTCCTGGAGCAGCAGAGA 360 EAILQVIQ RAERL DVL 72 E O O R

ATC	GG	CGG	CTG	GTG	GAG	CGG	CTG	GAG	ACC	ATC	GAGG	GCGG/	ĽΑΥ	GTG	ATG	GGG	AAC	GGC	CTG	-420
I	G	R	L	V	Ε	R	L	E	T	М	R	R	N	٧	М	G	N	G	L	.92
TCCC	CAG	TGI	CTG	CTC	TGC	GGG	GAG	GTG	CTG	GGG	CTTC	CTG	GGC.	AGC	TCG	TCG	GTG	TTC	TGC	480
S	Q	С	L	L	С	G	Ε	V	L	G	F	L	G	s	S	S	V	F	С	112
AAAC	SAC	TGC	CAGG	AAG	AAA	GTC'	TGC	ACC/	<b>AA</b> A	ТGТ	rgge	SATC	GAG	GCC	TCC	CCT	GGC	CAG	AAG	540
K	D	С	R	K	K	V	С	Т	K	С	G	I	E	A	S	P	G	Q	K	132
CGGC	CCC	СТС	TGG	CTG	TGT	AAG	ATC'	rgc	AGT	GAG	GCAA	AGAC	3AG	GTC	TGG	AAG	AGG	TCG	GGG	600
R	P	L	W	L	С	K	I	С	S	Ε	Q	R	Ε	V	W	K	; R	S	G	152
GCCT	'GG	ТТС	TAC	AAA	GGG	CTC	CCC	AAG:	rat.	ATC	CTTG	CCC	CTG	AAG	ACC	CCT	GGC	CGA	GCT	660
A	W	F	Y	K	G	L	P	K	Y	I	L	Р	L	K	Т	P	G	R	À	172
GATO	SAC	CCC	CAC	TTC	CGA	CCT'	TTG(	CCCA	ACG	GAP	ACCG	GCAG	SAG	CGA	GAG	CCC.	AGA	AGC	rct	720
D .	D	Р	Н	F	R	Р	L	Р	Т	Ε	Р	А	E	R	Ε	Р	R	S	S	192
GAGA	CC.	AGC	CGC.	ATC	TAC	ACG'	rgg(	GCC	CGA	GGA	AGA	GTC6	TA(	3GA	AGA	AAG'	TGC'	TGAT	rcc	780
Ε	Т	S	R	I	Y	Т	W	A	R	G	R	V	V	G	R	K	С	*		210
ACGC	TG	CAG	CCT	GGA'	TGA	GTC(	CTTC	SAAF	\AC	ACC	ATG	CGAA	GTO	GGA.	AGA	AGC	CGG/	AGA(	CGA	840
AAGG	(CC	GCG	TGT'	TGT	GTG?	ATC:	rcai	CTF	ATA'	TGA	.GCA	GTGG	TT	rcc.	AGT	GAC	AGT(	GAC	ŊĠŢ	900
GACT	'CG	GAT	CTT	AGC'	TCC	rcc <i>i</i>	AGCC	CTAC	AG	GAC	AGA	CTCC	CAT	rcci	ACT	GGG	GTC <i>l</i>	AGG(	GAC	960
CGGA	AA	GGC	GAC	AAA	CCCI	rgg/	AAG0	SAGI	CA	GGT	'GGC	AGCG	TGC	3AG	GCC	CCC	AGG?	ATG0	GG	1020
TTCA	CC	CAA	.CCC	GCG	GGC	CAC	CTCI	TTT	GG'	TTG	CAG	AGCA	.GC	CTG	GCC	AGT(	GGT	GAG <i>P</i>	\CG	1080
GGCA	CA(	GGC	ТСТ	GCT	GAC	CCG	CCAC	GGG	GA(	GGG	ACA	GGCT	'СТС	3CT	GAC	CCG	CCAC	GGGG	GA.	1140
CCCC	GC	CCC	GGG	CTG	ACC	CGA/	AGGG	GCCC	CCG	GTA	AAA	GACA	CAC	ССТО	GGA	CGA	GCC	CCC	SCT	1200
GCTG	(AC	GCA	GCT	CCA	GCAC	GGC	CCCI	CCF	\GC'	TGC	CTG	GGCT	'GAC	GT(	GTC	rggr	rgco	CTGC	SAA	1260
CAGA	CT'	rcc	CTG'	TGG	AGG <i>I</i>	TT	CCTC	GCCF	\GA(	ccc	TGC	CCGG	CTC	CCT	ccc:	rga(	CCGC	GTCC	TT	1320
GTGC	CC'	TCA	.CCA	GAC	ACC	CTGT	rtge	GCCP	ATG/	ACT	CAA	CAAA	CCF	\GT(	GTT(	GGG?	AGC(	CGTC	CTG	1380
CCTC	CC	CAG	CTC	AGT(	GCC1	የጥጥር	CTGC	CACC	CCC'	TTC	TCT	CCTG	GGG	SAG	CTG:	rcr(	GCAT	rcce	SCC	1440
ACCC	CC'	rcc	AAC	CAC'	TGC	CCTC	CAGO	ccc	CCG	ACC	TTA	ТТТА	TTF	ACC	CTC	odd:	rcco	CACA	/CC	1500
CCCA	TA	СТА	CCT	GGT(	GATO	SATT	TTT	AGI	TT	GCG	CGT	GTCT	TGG	GT	rgg(	GCT	GGG	GGGT	ттт	1560

CCCACATGCAGTGTCAGAGGGGCCGCCCGGTGGGGCTATCTCCGTTGCTATATTAATGGC -1620 AAGACTAAATGAAACCTAGGGCACGGCCTCCGAAGCTGCGTGTGGCCCCTTAGAGGTGAG 1:680 CATCAGAGCCAGAGCAGTGAGGGGGAGACTCACCCACCCTCTCCCTTCAGCTCT 1740 GGGAGGCAGGCGCAGTGCCCCCTCCCATGGGCTGGCCCAGGACCGCGGGTGAAACCTGG 1800 1860 TGCCCAGGCTGGGGTGCAGTGGCACGATCGCGGCTCACTGCAACCTCCACCTCCCGGGCT 1920 CAAGCGATTCTCTCACCTCAGCCTCCTGAGTAGGTGGGATTACAGATGCCCGCCACCACA 1980 CCCAGTTAATTTTTGTATTTTTAGAAGAGATGGGGTTTCTCCATGTTGGCCAGGCTGGTC 2040 TTGAACTCCTGGTCTCAAGTGATCCGCCCGCCTCGGCCTCCCAAAGTGCTGGGATTACAG 2100 GTGTGAGCCACCCAATCCTATTAGGTTTCTTTGAATCCCCTCATGGCCTGC 2160 TTTTTGCTCAGCCTGTCTTCAGCTTGAGGAGCTGGGAAGCTCTGGTGGATGCTATGAACT 2220 2280 2340 2400 ATCACACCCTCCCATCCTTCCTGCCTCCTGCCCCAAACCCCGGGTTCCTGGGAAG 2460 GGCCTTCTCCCAAGCTGGGAGCTCCTGGGCCCCCACCATTCACTTTTTTGTCCTTGCTGC TGGCAAACAGTAAAGAAACTCACTTTCCCTGTGGCACGTTATGCTTCAGAATTAAAACAA 2580 TGAAGATTAAAA 2592

### Fig.5

### **CL4**:

GGCTCCTCATCTGGAACACCTCGGGTCACCCCCGACAACGGTGGTGGGAGGGA	60
CTCCTCCTCCTGGTGGGGCCTGTCTGGGTGAAGCCCCTCTGTTCCCGAGGATCGTCCCA	120
ACCCCAGCCGGGTGCTCCGAGCCATGGCCGACACCATCTTCGGCAGCGGGAATGATCAG	180
TGGGTTTGCCCCAATGACCGGCAGCTTGCCCTTCGAGCCAAGCACTGACTG	240
GAACAGGACCAACACAGTCCCTGGTCTTAAAGCACAGGTGGGCAGAGGCTGCAGACGGGC	300
TGGTCCGTGCACACCTACCAGACGGAGAAGCAGGAGGAAGCAGCACCTCAGCCCGGCG	360

GAGGTGGAGGCCATCCTGCAGGTCATCCAGAGGGCAGAGCGGCTCGACGTCCTGGAGCAG	420
CAGAGAATCGGGCGGCTGGAGCGGCTGGAGACCATGAGGCGGAATGTGATGGGGAAC	480
M R R N V M G N	. 8
GGCCTGTCCCAGTGTCTGCTCTGCGGGGAGGTGCTGGGCTTCCTGGGCAGCTCGTCGGTG	540
G L S Q C L L C G E V L G F L G S S V	28
TTCTGCAAAGACTGCAGGAAGAAAGTCTGCACCAAATGTGGGATCGAGGCCTCCCCTGGC	600
F C K D C R K K V C T K C G I E A S P G	48
CAGAAGCGGCCCCTGTGGCTGTAAGATCTGCAGTGAGCAAAGAGAGGTCTGGAAGAGG	660
Q K R P L W L C K I C S E Q R E V W K R	68
TCGGGGGCCTGGTTCTACAAAGGGCTCCCCAAGTATATCTTGCCCCTGAAGACCCCTGGC	720
S G A W F Y K G L P K Y I L P L K T P G	88
CGAGCTGATGACCCCCACTTCCGACCTTTGCCCACGGAACCGGCAGAGCGAGAGCCCAGA	780
R A D D P H F R P L P T E P A E R E P R	108
AGCTCTGAGACCAGCCGCATCTACACGTGGGCCCGAGGAAGAGTCGTAGGAAGAAAGTGC	840
S S E T S R I Y T W A R G R V V G R K C ,	128
TGATCCACGCTGCAGCCTGGATGAGTCCTTGAAAACACCATGCGAAGTGGAAGAAGCCGG	900
AGACGAAAGGCCGCGTGTTGTGTGATCTCATCTATATGAGCAGTGGTTTCCAGTGACAGT	960
GACAGTGACTCGGATCTTAGCTCCTCCAGCCTAGAGGACAGACTCCCATCCACTGGGGTC 1	020
AGGGACCGGAAAGGCGACAAACCCTGGAAGGAGTCAGGTGGCAGCGTGGAGGCCCCCAGG 1	080
ATGGGGTTCACCCAACCCGCGGGCCACCTCTTTGGGTTGCAGAGCAGCCTGGCCAGTGGT 1	140
GAGACGGGCACAGGCTCTGCTGACCCGCCAGGGGGGGGGG	200
GGGGACCCCGCCCCGGGCTGACCCGAAGGGCCCCGGTAAAAGACACACCTGGACGAGCC 12	260
CCCGCTGCTGACGCAGCTCCAGCAGGCCCCTCCAGCTGCCTGGGCTGAGGTGTCTGGTGC 13	320
CTGGAACAGACTTCCCTGTGGAGGATTCCTGCCAGACCCTGCCCGGCTCCTCCCTGACCG 13	380
GTCCTTGTGCCCTCACCAGACACCCTGTTGGCCATGACTCAACAAACCAGTGTTGGGAGC 14	140
CGTCTGCCTCCCCAGCTCAGTGCCTTTCTGCACCCCTTCTCTCTGGGGAGCTGTCTGCA 15	500
	60
P:\原文说明言修訂版\US\US-3680.DOC/JAN	

CACACCCCAATCTACCTGGTGATGATTTTAAGTTTGCGCGTGTCTTGGGTTGGGCTGGG	1620
GGGTTTCCCACATGCAGTGTCAGAGGGGCCGCCCGGTGGGGCTATCTCCGTTGCTATATT	1680
AATGGCAAGACTAAATGAAACCTAGGGCACGGCCTCCGAAGCTGCGTGTGGCCCCTTAGA	1740
GGTGAGCATCAGAGCCAGAGCAGTGAGGGGGAGACTCACCCACC	1800
AGCTCTGGGAGGCAGGCGCAGTGCCCCCCTCCCATGGGCTGGCCCAGGACCGCGGGTGAA	1860
ACCTGGGTCTGTTTAGTTTCTTTGGTTTTTTGTATGTTTTGTTTTTTTGACACAGTCTCG	1920
CTTTGTTGCCCAGGCTGGGGTGCAGTGGCACGATCGCGGCTCACTGCAACCŢCCACCTCC	1980
CGGGCTCAAGCGATTCTCTCACCTCAGCCTCCTGAGTAGGTGGGATTACAGATGCCCGCC	2040
ACCACACCCAGTTAATTTTTGTATTTTTAGAAGAGATGGGGTTTCTCCATGTTGGCCAGG	2100
CTGGTCTTGAACTCCTGGTCTCAAGTGATCCGCCCGCCTCGGCCTCCCAAAGTGCTGGGA	2160
TTACAGGTGTGAGCCACCGCACCCAATCCTATTAGGTTTCTTTGAATCCCCTCATGGCCT	2220
GCCTGGTTTTTGCTCAGCCTGTCTTCAGCTTGAGGAGCTGGGAAGCTCTGGTGGATGCTA	2280
TGAACTCACTTGCTGAAGAGCAGCGTTCAGGTGCATCCCCAGCCAG	2340
TCAGCCATGAATTCACTTCTCTTCAGGAGGTTTGGCTTGGCATGAAAATACTTCATTCA	2400
AGTATGGGCAAATGCTTCTGGAAAACCCTTCCCTGAAGAGAGAG	2460
TCGGTGATCACACCCTCCCATCCTTCCTGCCTCCTGCCCCAAACCCCGGGTTCCTGGGTC	2520
TGGAAGGGCCTTCTCCCAAGCTGGGAGCTCCTGGGCCCCCACCATTCACTTTTTGTCCT	2580
TGCTGCTGGCAAACAGTAAAGAAACTCACTTTCCCTGTGGCACGTTATGCTTCAGAATTA	2640
AAACAATGAAGATTAAAA	2658

Fig. 6

	06		GGGGCCTGTCTGGGT	GGGGCCTGTCTGGGT	GGGGCCTGTCTGGGT	GGGGCCTGTCTGGGT	GGGGCCTGTCTGGGT	180	GGGAATGATCAG	AGCGGGAATGATCAG	GGGAATGATCAG	GGGAATGATCAG	AGCGGGAATGATCAG	GGGAATGATCAG
	75 76		CTCCTCCTCCTGGT GGG	CTCCTCCTCCTGGT GGG	CTCCTCCTCCTGGT GGG	CTCCTCCTCGT GGG	CTCCTCCTCCTGGT GGG	165 166	CATCTTCGGC AGO	GACACCATCTTCGGC AGC	CATCTTCGGC AGO	GACACCATCTTCGGC AGCGGGAATGATCAG	GACACCATCTTCGGC AGC	CATCTTCGGC AGC
	60 61		GGGAGGAGAGCGGC CTCCTC		GGGAGGAGAGCGGC CTCCTC	GGGAGGGAGAGCGGC CTCCTC	GGGAGGAAGCGGC CTCCTC	150 151	CTCCGAGCCATGGCC GACACCATCTTCGGC AGCGGGAATGATCAG	TGGCC	CCGAGGATCGTCCCA ACCCCCAGCCGGGTG CTCCGAGCCATGGCC GACACCATCTTCGGC AGCGGAATGATCAG	CTCCGAGCCATGGCC GACAC		CTCCGAGCCATGGCC GACACCATCTTCGGC AGCGGGAATGATCAG
	45 46	†             		CCCGACAACGGTGGT GGGAGGGGAGAGCGGC		rggt gggaggg		135 136		GGTG CTCCGAG	GGTG CTCCGAG		GGTG CTCCGAG	GRECCARE
	31		CCCGACAACGG1	CCCGACAACGG1	CCCGACAACGG	CCCGACAACGG	CCCGACAACGGTGGT	121	ACCCCCAGCCGGGTG	ACCCCCAGCCG	ACCCCCAGCCG	ACCCCCAGCCG	ACCCCCAGCCG	
	30		CCTCGGGTCACC	CCTCGGGTCACC	CCTCGGGTCACC	CCTCGGGTCACC	ACACCTCGGGTCACC	120	TCCCA	CCGAGGATCGTCCCA ACCCCCAGCCGGGTG CTCCGAGCCA	AGGATCGTCCCA	CCGAGGATCGTCCCA ACCCCCAGCCGGGTG	CCGAGGATCGTCCCA ACCCCCAGCCGGGTG CTCCGAGCCATGGCC	かまかかかっていることである。そのでであっておかっている。
	. 15 16	1   1   1   1   1   1   1   1   1   1	GGCTCCTCATCTGGA ACACCTCGGGTCACC CCCGACAACGGTGGT	GGCTCCTCATCTGGA ACACCTCGGGTCACC	GGCTCCTCATCTGGA ACACCTCGGGTCACC CCCGACAACGGTGGT	GGCTCCTCATCTGGA ACACCTCGGGTCACC CCCGACAACGGTGGT	GGCTCCTCATCTGGA ACA	105 106	; ; ; ; ; ; ; ;	GAAGCCCTCTGTTC CCG	GAAGCCCCTCTGTTC CCG	GAAGCCCCTCTGTTC CCG	GAAGCCCTCTGTTC CCG	
-	-	NOC2	NL1 GGCTCCT	LC1 GGCTCCT	LC2 GGCTCCT	LC3 GGCTCCT	LC4 GGCTCCT	91	NOC2	NL1 GAAGČCC	LC1 GAAGCC	LC2 GAAGCC	LC3 GAAGCC	1

	108	223	223	0/0	223	270		179	294	294	360	2.94	260
270		 	 	GTCTTAA	 	STCTTAA	360	9099000	505500	5055000	5055000	೨೨೨೨೨	5055000
255 256	; ; ; ; ;	1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	VACAC AGTCCCTGGTCTTAA	! ! ! ! ! ! !	ACAC AGTCCCTGGTCTTAA	345 346	CAGAGGAGGAAGCAG CACCTCAGCCCGGCG	GCAG CACCTCAGCCCGGCG	GCAG CACCTCAGCCCGGCG	AGCAG CACCTCAGCCCGGCG	AGCAG CACCTCAGCCCGGCG	CAGAGGAAGCAG CACCTCAGCCCGGCG
240 241	; 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	T GAACAGGACCAACAC	\$               	T GAACAGGACCAACAC	30 331		G CAGAGGAGGAAGCAG	G CAGAGGAGGAAGCAG	G CAGAGGAGGAAGCAG	G CAGAGGAGGAAGCAG	
. 928		]   	! ! ! ! ! !	TGACTGCACAGCAGT	1 1 1 1 1 1	GACTGCACAGCAG	316 33(	raccagacggaga?	ACCAGACGGAGAA	TACCAGACGGAGAAG	TACCAGACGGAGAA	TACCAGACGGAGAA	TACCAGACGGAGAAG
1 225	CTTCGAGCCAAGC	CGAGCCAAGC	CTTCGAGCCAAGC		CGAGCCAAGC	CTTCGAGCCAAGCAC TGACTGCACAGCAGT	1 315	TGGTCCGTGCACACC TACCAGACGGAGAAG	-TGCAGACGGGC TGGTCCGTGCACACC TACCAGACGGAGAAG	TGGTCCGTGCACACC 1	TGGTCGGTGCACAC TACCAGACGGAGAAG	TGCAGACGGGC TGGTCCGTGCACACC TACCAGACGGAGAAG	TGGTCCGTGCACACC
210 211	GACCGGCAGCTTGCC CT'	GCAGCTTGCC CT1	GACCĠĠCAGCTTGCC CT1	GCAGCTTGCC CT1	GACCGGCAGCTTGCC CTTCGAGCCAAGC	GACCGGCAGCTTGCC CTT	300 301	TGCAGACGGGC TG(	GCAGACGGGC TGG	-TGCAGACGGGC TGC	AGGCTGCAGACGGGC TGC	GCAGACGGGC TG	
196		GACCG		GACCG	GACCGG	GACCGG	286	)	)L	) L I	AGGCT	) <u>L</u>	AGGCT(
181 195	TGGGTTTGCCCCAAT	TGGGTTTGCCCCCAAT GACCGGCAGCTTGCC CTTCGAGCCAAGC-	TGGGTTTGCCCCAAT	TGGGTTTGCCCCAAT GACCGGCAGCTTGCC CTTCGAGCCAAGCAC	TGGGTTTGCCCCAAT	TGGGTTTGCCCCAAT	271 285		1 1 1 1 1 1	               	AGCACAGGTGGGCAG	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	AGCACAGGTGGCAG AGGCTGCAGACGGGC
	1 NOC2	2 NL1	3 LC1	4 LC2	5 LC3	LC4		1 NOC2			4 LC2	5 LC3	6 LC4

269

GAGGCCTCCCCTGGC CAGAAGCGGCCCCTG TGGCTGTGTAAGATC	ACCAAATGTGGGATC	AGGAAGAAAGTCTGC	TTCTGCAAAGACTGC	6 LC4
GAGGCCTCCCCTGGC CAGAAGCGGCCCCTG TGGCTGTGTAAGATC	ACCAAATGTGGGATC	AGGAAGAAAGTCTGC	TTCTGCAAAGACTGC	5 LC3
GAGGCCTCCCTGGC CAGAAGCGGCCCCTG TGGCTGTGTAAGATC	ACCAAATGTGGGATC	AGGAAGAAAGTCTGC	TTCTGCAAAGACTGC	4 LC2
GAGGCCTCCCTGGC CAGAAGCGGCCCCTG TGGCTGTGTAAGATC	ACCAAATGTGGGATC	AGGAAGAAAGTCTGC	TTCTGCAAAGACTGC	3 LC1
	1 1 1 1 1 1	AGGAAG	TTCTGCAAAGACTGC	2 NL1
GAGGCCTCCCCTGGC CAGAAGCGGCCCCTG TGGCTGTGAAGATC	ACCAAATGTGGGATC	AGGAAGAAAGTCTGC	TTCTGCAAAGACTGC	1 NOC2
5 586 600 601 615 616 630	571 585	556 570	541 555	
CTGCTCTGCGGGAG GTGCTGGGCTTCCTG GGCAGCTCGTCGGTG	GGCCTGTCCCAGTGT	AATGTGATGGGGAAC (	GAGACCATGAGGCGG	6 LC4
CTGCTCTGCGGGAG GTGCTGGGCTTCCTG GGCAGCTCGTCGGTG	GGCCTGTCCCAGTGT	AATGTGATGGGGAAC (	GAGACCATGAGGCGG	5 LC3
CTGCTCTGCGGGAG GTGCTGGGCTTCCTG GGCAGCTCGTCGGTG	GGCCTGTCCCAGTGT	AATGTGATGGGGAAC	GAGACCATGAGGCGG	4 LC2
CTGCTCTGCGGGAG GTGCTGGGCTTCCTG GGCAGCTCGTCGGTG	GGCCTGTCCCAGTGT	AATGTGATGGGGAAC	GAGACCATGAGGCGG	3 LC1
CTGCTCTGCGGGAG GTGCTGGGCTTCCTG GGCAGCTCGTCGGTG	GGCCTGTCCCAGTGT	AATGTGATGGGGAAC	GAGACCATGAGGCGG	2 NL1
CTGCTCTGCGGGAG GTGCTGGGCTTCCTG GGCAGCTCGTCGGTG	GGCCTGTCCCAGTGT	AATGTGATGGGGAAC	GAGACCATGAGGCGG	1 NOC2
5 496 510 511 525 526 540	481 495	466 480	451 465	
GACGTCCTGGAGCAG CAGAGAATCGGGCGG CTGGTGGAGCGGCTG	AGGGCAGAGCGGCTC	CTGCAGGTCATCCAG	GAGGTGGAGGCCATC	6 LC4
GACGTCCTGGAGCAG CAGAGAATCGGGCGG CTGGTGGAGCGGCTG	AGGGCAGAGCGGCTC	CTGCAGGTCATCCAG	GAGGTGGAGGCCATC	5 LC3
SACGTOCTGGAGCAG CAGAGAATCGGGCGG CTGGTGGAGCGGCTG	AGGGCAGAGCGGCTC	CTGCAGGTCATCCAG AGGGCAGAGCGGCTC	GAGGTGGAGGCCATC	4 LC2
GACGTCCTGGAGCAG CAGAGAATCGGGCGG CTGGTGGAGCGGCTG	AGGGCAGAGCGGCTC	CTGCAGGTCATCCAG AGGGCAGAGCGGCTC	GAGGTGGAGGCCATC	3 LC1

	539	567	654	720	54	720			629	657	744	810	744	010		643	671	758
720	CTGAAGACCCCTGGC	CTGAAGACCCCTGGC	CTGAAGACCCCTGGC	CTGAAGACCCCTGGC	CTGAAGACCCCTGGC	CTGAAGACCCCTGGC	0	010	CGCATCTACACGTGG	CGCATCTACACGTGG	CGCATCTACACGTGG	CGCATCTACACGTGG	CGCATCTACACGTGG	CGCATCTACACGTGG	006	)             	; 1 1 1 1	
901	CTGAAGA	CTGAAGA	CTGAAGA	CTGAAGA	CTGAAGA	CTGAAGA		96/0		CGCATCT	CGCATCT	CGCATCT	CGCATCT	CGCATCT	5 886	1 1 1 1	 	† 1 1 1 1
705	AAGTATATCTTGCCC	AAGTATATCTTGCCC	AAGTATATCTTGCCC	AAGTATATCTTGCCC	AAGTATATCTTGCCC	AAGTATATCTTGCCC	,	0 P /	AGCTCTGAGACCAGC	AGCTCTGAGACCAGC	AGCTCTGAGACCAGC	AGCTCTGAGACCAGC	AGCTCTGAGACCAGC	AGCTCTGAGACCAGC	885	 	1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
90 691		AAGTATA	AAGTATA	AAGTATA	AAGTATA	AAGTAT!		781							9 871	1 1	       	1
69	TACAAAGGGCTCCCC	TACAAAGGGCTCCCC	TACAAAGGGCTCCCC	TACAAAGGGCTCCCC	TACAAAGGGCTCCCC	TACAAAGGGCTCCCC		780	AGAGCCCAGA	GAGCGAGAGCCCAGA	GAGCGAGAGCCCAGA	GAGCGAGAGCCCAGA	GAGCGAGAGCCCAGA	GAGCGAGAGCCCAGA	870	           		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
929	TACAA	TACAA	TACAA	TACAA	TACAA	TACAA	,	991	GAGCG	GAGCG.	GAGCG.	GAGCG	GAGCG	GAGCG,	928	1 1 1 1	†         	1 1
675	TCGGGGGCCTGGTTC	TCGGGGGCCTGGTTC	TCGGGGGCCTGGTTC	TCGGGGGCCTGGTTC	TCGGGGGCCTGGTTC	TCGGGGGCCTGGTTC		765	CGGAACCGGCA	CGACCTTGG CCCACGGAACCGGCA	CCCACGGAACCGGCA	CCCACGGAACCGGCA	CCCACGGAACCGGCA		855	    -  -  -  -  -	 	 
0 661								0 751	CCCA	CCCA				CCCA	0 841	} ! !	 	1
099	GAGGTCTGGAAGAGG	GTCTGGAAGAGG	TCTGGAAGAGG	ŢĊŢĠĠĄĄĠĠĠ	TCTGGAAGAGG	TCTGGAAGAGG		750	FTCCGACCTTTG	TCCGACCTTGG	TCCGACCTTTG	CACTTCCGACCTTTG	TCCGACCTTTG	TCCGACCTTTG	840	1 	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	! ! ! ! ! !
5 646		9	GAGG	GAGG	GAGG	GAGG		735 736	CAC1	CAGT	CACT		CACT	CACT	5 826	1	!	   
1 645	TGCAGTGAGCAAAGA	1 1 1	TGCAGTGAGAAGA GAGGTCTGGAAGAGG	TGCAGTGAGCAAAGA GAGGTCTGGAAGAGG	TGCAGTGAGAAGA GAGGTCTGGAAGAGG	TGCAGTGAGCAAAGA GAGGTCTGGAAGAGG			CGAGCTGATGACCCC CACTTCCGACCTTTG CCCACGGAACCGGGCA GAGCGAGAGCCCAGA	CGAGCTGATGAGCCC CAGTTC	CGAGCTGATGACCCC CACTTCCGACCTTTG	CGAGCTGATGACCCC	CGAGCTGATGACCCC CACTTCCGACCTTTG	CGAGCTGATGACCCC CACTTCCGACCTTTG CCCACGGAACCGGCA	1 825	GCCCGAGGAAGAGT-	GCCCGAGGAAGAGT-	- 154544554555555
631	1 NOC2 TG	2 NL1	3 LC1 TG	4 LC2 TG	5 LC3 TG	6 LC4 TG		721	1 NOC2 CC	2 NL1 CG	3 LC1 CG	4 LC2 CG	5 LC3 CG	6 LC4 CG	811	1 NOC2 GC	2 NL1 GC	יט ניט א

006 25005		066	TCCAGC 689	TCCAGC 717	TCCAGC 804	TCCAGC 870	TCCAGC 924	TCCAGC 990	1080	CCCAGG 779	CCCAGG 807	CCCAGG 894	CCCAGG 960
AGTGGAAGAAGCCGG		5 976	CTTAGCTCCTCCAGC	CTTAGCTCCTCCAGC	CTTAGCTCCTCCAGC	CTTAGCTCCTCCAGC	CTTAGCTCCTCCAGC	CTTAGCTCCTCCAGC	1065 1066	GTGGAGGCCCCCAGG	GTGGAGGCCCCCAGG	GTGGAGGCCCCCAGG	GTGGAGGCC
	GAAAACACCATGCGA	975	GACAGTGACTCGGAT	GACAGTGACTCGGAT	GACAGTGACTCGGAT	GACAGTGACTCGGAT	GACAGTGACTCGGAT	GACAGTGACTCGGAT	106	GAGTCAGGTGGCAGC	GAGTCAGGTGGCAGC	GAGTCAGGTGGCAGC	GAGTCAGGTGGCAGC GTGGAGGCCCCCAGG
つううりじょうしゅうしゅ てりつり 「ようしんしんなんなり」 「		960 961							1050 1051				
TGATCCACGCTGCAG CCTGGATGAGTCCTT	CCTGGATGAGTCCTT		GTTTCCAGTGACAGT	GTTTCCAGTGACAGT	GTTTCCAGTGACAGT	GTTTCCAGTGACAGT	GTTTCCAGTGACAGT	GTTTCCAGTGACAGT		GACAAACCCTGGAAG	GACAAACCCTGGAAG	AGGGACCGGAAAGGC GACAAACCCTGGAAG	AAACCCTGGAA
CITION OF THE	CTGCAG CCT	945 946	G GTT	G GTT	G GTT	G GTT			1035 1036			AAAGGC GAC	AAAGGC GAC
		0 931	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1	! ! ! ! !	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	N TCTATATGAGCAGTG	GTGATCTCA TCTATATGAGCAGTG	1020 1021	S AGGGACCGGAAAGGC	: AGGGACCGGAAAGGC		AGGGACCGG
GTAGGAAGAAGTGC	SAAGAAAGTGC	930			; ; ; ; ; ; ;	; ; ; ; ; ; ;	STGTGATCTCA	FTGTGATCTCA		CCATCCACTGGGGTC	CACTGGGGTC	CCATCCACTGGGGTC	CACTGGGGTC
	GTAGGA	5 916	7 de 2 de	 	1 1 1 1	1 1 1	; TGTTGT	; TGTTGT	1005 1006		CCATCC		CCATC
GCCCGAGGAAGAGTC	GCCCGAGGAAGAGTC	901 915			; ; 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	AGACGAAAGGCCGCG	AGACGAAAGGCCGCG	991 1005	CTAGAGGACAGACTC	CTAGAGGACAGACTC	CTAGAGGACAGACTC	CTAGAGGACAGACTC CCATCCACTGGGTC AGGGACCGGAAAGGC GACAAACCCTGGAAG
5 LC3 G	6 LC4 G	σ	1 NOC2	2 NL1 -	3 LC1 -	4 LC2 -	5 LC3 A	6 LC4 A	σ	1 NOC2 C	2 NL1 C	3 LC1 C	4 LC2 C

1014	1080		847	897	84	1050	1104	1170	_	929	987	•	1140	1194	1260
GAGTCAGGTGGCAGC GTGGAGGCCCCCAGG	3GCCCCCAGG	1170	1 1 1 1 1 1 1	TCTGCTGACCCGCCA	TCTGCTGACCCGCCA	GAGACGGCACAGGC TCTGCTGACCCGCCA	TCTGCTGACCCGCCA	TCTGCTGACCCGCCA	1260	TGGACGAGCC	GCCCCGGTAAAGAC ACACCTGGACGAGCC	GCCCCGGTAAAAACAC ACACCTGGACGAGCC	TGGACGAGCC	GCCCCGGTAAAAGAC ACACCTGGACGAGCC	GCCCCGGTAAAAGAC ACACCTGGACGAGCC
GTGGA	GTGGA(	1155 1156	1 	TCTGC	TCTGC	TCTGC	TCTGC	TCTGC	1245 1246	ACACC	ACACC	ACACC	ACACC	ACACC	ACACC
GGTGGCAGC	GGTGGCAGC	1155	GG	GAGACGGGCACAGGC	GAGACGGGCACAGGC	GGCACAGGC	GAGACGGGCACAGGC	GAGACGGGCACAGGC	1245	GTAAAAGAC	GTAAAAGAC	GTAAAAGAC	GTAAAAGAC	GTAAAAGAC	GTAAAAGAC
GAGTCA(	GAGTCA	40 1141	GAGACG	GAGACG	GAGACG	GAGACG	GAGACG	GAGACG	30 1231	900009	900009	900009	900009	922229	922229
	ACCCTGGAAG	1140	AGCCTGGCCAGTGGT GAGACGGG-	GCCAGTGGT			AGCCTGGCCAGTGGT	GGCCAGTGGT	1230	TCTGCTGACCCGCCCA GGGGGACCCCCCCCGCTGACCCGGAAGG GCCCCGGTAAAGAC ACACCTGGACGAGCC	TCTGCTGACCCGCCA GGGGGACCCCGCCCC GGGCTGACCCGAAGG	TCTGCTGACCCGCCA GGGGGACCCCGCCCC GGGCTGACCCGAAGG	GGGGGACCCCCCCC GGGCTGACCCGAAGG GCCCCGGTAAAAGAC ACACCTGGACGAGCC	GACCCGAAGG	TCTGCTGACCCGCCA GGGGGACCCCGCCCC GGGCTGACCCGAAGG
GACAA	GACAA	1126		AGCCT	AGCCT	AGCCT	AGCCT	AGCCT	1215 1216	GGGCT	GGGCT	GGGCT	GGGCT	GGGCT	GGGCT
CCGGAAAGGC	CGGAAAGGC	1125	TCTGGGTGCCAGAGC	TTTGGGTTGCAGAGC AGCCTGGCCAGTGGT	TTTGGGTTGCAGAGC AGCCTGGCCAGTGGT	TTTGGGTTGCAGAGC AGCCTGGCCAGTGGT	TTTGGGTTGCAGAGC	TTTGGGTTGCAGAGC AGCCTGGCCAGTGGT	1215	ACCCCGCCCC	acccccccc	ACCCCGCCCC	ACCCGGCCC	GGGGGACCCCCCCC GGGCTGACCCGAAGG	ACCCGCCCC
AGGGA	AGGGA	1111	TCTGG	TTTGG	TTTGG	TTTGG	TTTGG	TTTGG	1201	99999	799999	299999		66666	GGGGG,
ACTGGGGTC	ACTGGGGTC	1110	CCGCCGGGCCACCTC	SGGCCACCTC	SGGCCACCTC	SGGCCACCTC	SGGCCACCTC		1200	TGACCCGCCA	rgacccgcca	IGACCCGCCA	TCTGCTGACCCGCCA	TCTGCTGACCCGCCA	rgacccgcca
CCATCC	CCATC	1096	ರಿದಿಲ್ಲಿ	CCCGC	CCCGC	CCCGC	CCCGC	CCCGC	1186	TCTGC	TCTGC	TCTGC	TCTGC	TCTGC	TCTGC
CTAGAGGACAGACTC CCATCCACTGGGGTC AGGGACCGGAAAGGC GACAAACCCTGGAAG	CTAGAGGACAGACTC CCATCCACTGGGGTC AGGGACCGGAAAGGC GACAAACCCTGGAAG GAGTCAGGTGGCAGC GTGGAGGCCCCCAGG	31 1095	ATGGGGTTCACCCAC	ATGGGGTTCACCCAA CCCGCGGGCCACCTC	71 1185	GACAGGC	GGGGAGGGACAGGC	GGGGGAGGGACAGGC	GGGGGAGGGACAGGC	GGGGGAGGGACAGGC	GGGGGGGGACAGGC				
LÇ3 CTA	LC4 CTA	1081	NOC2 AT		LC1 ATC	LC2 AT	LC3 AT(	LC4 AT	1171	NOC2	NL1 GG	LC1 GG	LC2 GG	LC3 GG	LC4 GG
5 L	6 L		Z	2 NL1	3	4 L	5 L	9 P		Z H	N N	3 L	4	S L	9 7

	1019	1017	1164	1230	94	1350		1109	1167	1254	1320	1374		
1350	GATTCCT	GATTCCT	GATTCCT	GATTCCT	GATTCCT	GATTCCT	1440	rtgggagc	TGGGAGC	TGGGAGC	TGGGAGC	TGGGAGC	TGGGAGC	
1335 1336	CTGTGGAG	CTGTGGAGGATTCCT	CTGTGGAGGATTCCT	CTGTGGAGGATTCCT	CTGTGGAGGATTCCT	CTGTGGAGGATTCCT	1425 1426	ACCAGTG1	ACCAGTGT	GCCATGACTCAACAA ACCAGTGTTGGGAGC	GCCATGACTCAACAA ACCAGTGTTGGGAGC	GCCATGACTCAACAA ACCAGTGTTGGGAGC	GCCATGACTCAACAA ACCAGTGTTGGGAGC	
133	CAGACTTCC	AGACTTCC	CTGGAACAGACTTCC	CTGGAACAGACTTCC	CTGGAACAGACTTCC	AGACTTCC	142	ACTCAACAA	ACTCAACAA	ACTCAACAA	ACTCAACAA	ACTCAACAA	ACTCAACAA	
1320 1321	C CTGGAAC	C CTGGAAC		C CTGGAAC		C CTGGAAC	10.1411	G GCCATG	G GCCATG		G GCCATGA			
13	TGTCTGGTG	TGAGGTGTCTGGTGC CTGGAACAGACTTCC	TGAGGTGTCTGGTGC	TGAGGTGTCTGGTGC	TGAGGTGTCTGGTGC	TGTCTGGTG	14	CCAGACACCCTGTTG GCCATGACTCAACAA ACCAGTGTTGGGAGC	CCAGACACCCTGTTG GCCATGACTCAACAA ACCAGTGTTGGGAGC	CCAGACACCCTGTTG	CCAGACACCCTGTTG	CCAGACACCCTGTTG	CCAGACACCCTGTTG	
1305 1306	TGAGG	TGAGG	TGAGG	TGAGG	TGAGG	TGAGG	1396	CCAGA	CCAGA	CCAGA	CCAGA	CCAGA	CCAGA	
1305	TCCAGCTGCCTGGGC TGAGGTGTCTGGTGC CTGGAACAGACTTCC CTGTGGAGGATTCCT	TCCAGCTGCCTGGGC	TCCAGCTGCCTGGGC	TCCAGCTGCCTGGGC	TCCAGCTGCCTGGGC	CTGCCTGGGC	1395	GTCCTTGTGCCCTCA		GTCCTTGTGCCCTCA	GTCCTTGTGCCCTCA	GTCCTTGTGCCCTCA	GTCCTTGTGCCCCTCA	
1291	TCCAG	TCCAG	TCCAG	TCCAG	TCCAG	TCCAG	1381		GTCCI		GTCCI			
1290	AGCAGGCCCC	AGCAGGCCCC	AGCAGGCCCC	AGCAGGCCCC	AGCAGGCCCC	AGCAGGCCCC	1380	TCCCTGACCG	TCCCTGACCG	TCCCTGACCG	TCCCTGACCG	TCCCTGACCG	TCCCTGACCG	
1275 1276	GCTCC	GCTCC	GCTCC	GCTCC	GCTCC	GCTCC	1365 1366	GCTCC	GCTCC	GCTCC	GCTCC	GCTCC	GCTCC	
1261 1275	NOC2 CCCGCTGACGCA GCTCCAGCAGGCCCC	CCCGCTGTGACGCA GCTCCAGCAGGCCCC	CCCGCTGTGACGCA GCTCCAGCAGGCCCC	CCCGCTGACGCA GCTCCAGCAGGCCCC	CCCGCTGCTGACGCA GCTCCAGCAGGCCCC	CCCGCTGCTGACGCA GCTCCAGCAGGCCCC TCCAGCTGCCTGGGC TGAGGTGTCTGGTGC CTGGAACAGACTTCC	1351 1365	GCCAGACCCTGCCCG GCTCCTCCTGACCG	GCCAGACCCTGCCCG GCTCCTCCTGACCG GTCCTTGTGCCCTCA	GCCAGACCCTGCCCG GCTCCTCCCTGACCG	GCCAGACCCTGCCCG GCTCCTCCTGACCG	GCCAGACCCTGCCCG GCTCCTCCCTGACCG	GCCAGACCCTGCCCG GCTCCTCCCTGACCG	
12	NOC2 C	NLIC	LC1 C	LC2 C	2 FC3 C	5 LC4 C	7	NOC2 0	2 NL1 G	3 LC1 G	4 LC2 G	5 LC3 G	6 LC4 G	

1530 CACCCCTTCTCTCT GGGGAGCTGTCTGCA TCCGCCACCCCCTCC AACCACTGCCCTCAG CACCCCTTCTCTCT GGGGAGCTGTCTGCA TCCGCCACCCCCTCC AACCACTGCCTCAG CACCCCTTCTCTCT GGGGAGCTGTCTGCA TCCGCCACCCCCTCC AACCACTGCCCTCAG 1515 1516 1500 1501 1485 1486 1470 1 NOC2 CGTCTGCCTCCCAG CTCAGTGCCTTTCTG 2 NL1 CGTCTGCCTCCCAG CTCAGTGCCTTTCTG 3 LC1 CGTCTGCCTCCCAG CTCAGTGCCTTTCTG 1455 1456 1441

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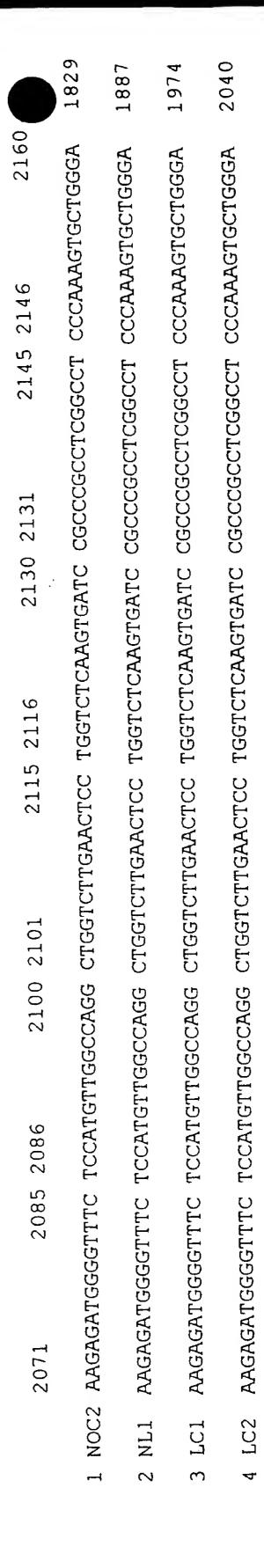
1257

1410	1464	1530			68	1347	1434	1500	1554	1620		1379	7		1524	1590	1644	1710
AACCACTGCCCTCAG	AACCACTGCCCTCAG	AACCACTGCCCTCAG		1605 1606 1620	TTGGGTTGGGCTGGG	TTGGGTTGGGCTGGG	TTGGGTTGGGCTGGG	TTGGGTTGGGCTGGG	TTGGGTTGGGCTGGG	TTGGGTTGGGCTGGG	1696 1710	A A T G G G A G A G A A T G A A A C C T A G G C A C	i	TGAAACCTAGGGCAC	TGAAACCTAGGGCAC	TGAAACCTAGGGCAC	TGAAACCTAGGGCAC	AATGGCAAGACTAAA TGAAACCTAGGGCAC
TCCGCCACCCCCTCC 1	TCCGCCACCCCCTCC 1	TCCGCCACCCCCTCC		1591	AAGTTTGCGCGTGTC	AAGTTTGCGCGTGTC	AAGTTTGCGCGTGTC	AAGTTTGCGCGTGTC	AAGTTTGCGCGTGTC	AAGTTTGCGCGTGTC	1691 1695			AATGGCAAGACTAAA TGAAACCTAGGGCAC	AATGGCAAGACTAAA	AATGGCAAGACTAAA	AATGGCAAGACTAAA	
	Α.	GGGGAGCTGTCTGCA		1576 1590	CCTGGTGATGATTTT	CCTGGTGATGATTTT	CCTGGTGATGATTTT	CCTGGTGATGATTTT	CCTGGTGATGATTTT	CCTGGTGATGATTTT	1665 1666 1680		GCCCGGTGGGGCTAT CTCCG11GC1A1A11	CTCCGTTGCTATATT	CTCCGTTGCTATATT	CTCCGTTGCTATATT		CTCCGTTGCTATATT
SACCCCTTCTCTCCT (	CACCCTTCTCTCT	CACCCCTTCTCTCCT		1561 1575	CACACCCCCAATCTA	CACACCCCCAATCTA	CACACCCCCAATCTA	CACACCCCCAATCTA	CACACCCCCAATCTA	CACACCCCCAATCTA	1650	1	GCCCGGTGGGGCTAT	GCCCGGTGGGGCTAT	GCCCGGTGGGGCTAT	GCCCGGTGGGGGCTAT	TALLOGUEGUEGUEAL	GCCGGTGGGGCTAT
STCAGTGCCTTTCTG (	CTCAGTGCCTTTCTG (		,	1546 1560	ATTACCCTCCCTCC		ATTACCCTCCCCTCC		ATTACCCTCCCTCC CACACCCCAATCTA	ATTACCETECETEC CACACCCCCAATETA CETGGTGATGATTT		1636	AGTGTCAGAGGGGCC	AGTGTCAGAGGGGCC	AGTGTCAGAGGGGCC	**************************************		
GGTCTGCCTCCCAG CTCAGTGCCTTTCTG CACCCCTTCTCTCT GGGGAGCTGTCTGCA	CGTCTGCCTCCCCAG			1531 1545	CCCCGACCTTATT	CCCCGACCTTATTT						1621 1635	GGGTTTCCCACATGC		ごむ 4 2 4 2 2 2 2 4 4 2 2 2 2 2 2 2 2 2 2		GGGTTTCCCACATG	GGGTTTCCCACATGC
LC2					COCK	N C	rC1	( ) I			0 C4		1 NOC2				4 LC2	5 LC3

	1469	1527	1614	1680	<b>7</b>	1800		1559	1617	1704	1770		1890		1649	1707
1800	TCCCTTC	TCCCTTC	TCCCTTC	TCCCTTC	TCCCTTC	TCCCTTC	1890	GTTTCTTTGGTTTTT	rggtttt	rggtttt	rggtttt	GGTTTTT	rggtttt	1980	CCACCTCC	CACCTCC
1786	TCTCCCTCCCTTC	TCTCCCTCTCCCTTC	TCTCCCTCTCCCTTC	TCTCCCTCTCCTTC	TCTCCCTCTCCTTC	TCTCCCTCTCCTTC	5 1876		GTTTCTTTGGTTTTT	GTTTCTTTGGTTTTT	GTTTCTTTGGTTTTT	GTTTCTTTGGTTTTT	AGGACCGCGGGTGAA ACCTGGGTCTGTTTA GTTTCTTTGGTTTTT	1965 1966	CGATCGCGGCTCACT GCAACCTCCACCTCC	GCAACCTCCACCTCC
1785	GAGACTCACCCACCC	GAGACTCACCCACCC	GAGACTCACCCACCC	GAGACTCACCCACCC	GAGACTCACCCACCC	GAGACTCACCCACCC	1875	ACCTGGGTCTGTTTA	STCTGTTTA	ACCTGGGTCTGTTTA	ACCTGGGTCTGTTTA	TCTGTTTA	TCTGTTTA	196	CGGCTCACI	CGATCGCGGCTCACT
0 1771							60 1861		A ACCTGGG			A ACCTGGG	A ACCTGGG	50 1951		
177	AGTGAGGG	AGTGAGGGG	CAGAGCAGTGAGGGG	CAGAGCAGTGAGGGG	CAGAGCAGTGAGGGG	CAGAGCAGTGAGGGG	18(	GGGGGTGA	AGGACCGCGGGTGAA ACCTGGGTCTGTTTA	GCGGGTGA	GCGGGTGA	GCGGGTGA	GCGGGTGA	19	rgcagtggc	GCAGTGGC
14756	CAGAGC	CAGAGC	CAGAGC	CAGAGC	CAGAGC	CAGAGC	1846	AGGACC	AGGACC	AGGACC	AGGACC	AGGACC		5 1936	TGGGGT	TGGGGT
1755	GGTGAGCATCAGAGC CAGAGCAGTGAGGGG	GGTGAGCATCAGAGC CAGAGCAGTGAGGGG	GGTGAGCATCAGAGC	GGTGAGCATCAGAGC	GGTGAGCATCAGAGC	GGTGAGCATCAGAGC	1845	CCCATGGGCTGGCCC AGGACCGCGGGTGAA	CCCATGGGCTGGCCC	CCCATGGGCTGGCCC AGGACCGCGGGTGAA	CCCATGGGCTGGCCC AGGACCGCGGGGTGAA	CCCATGGGCTGGCCC AGGACCGCGGGTGAA ACCTGGGTCTGTTTA	CCCATGGGCTGGCCC	1935	CTTTGTTGCCCAGGC TGGGGTGCAGTGGCA	TTTGACACAGICTCG CTTTGTTGCCCAGGC TGGGGTGCAGTGGCA
1741	GGTGA	GGTGA	GGTGA	GGTGA			1831							1921	CTTTG	CTTTG
1740	GTGTGGCCCCTTAGA	GTGTGGCCCCTTAGA	GTGTGGCCCCTTAGA	GTGTGGCCCCTTAGA	GTGTGGCCCCTTAGA	GTGTGGCCCCTTAGA	1830	GTGCCCCCT	GCGCAGTGCCCCCT	GCGCAGTGCCCCCCT	GCGCAGTGCCCCCT	TGCCCCCT	TGCCCCCT	1920	TTTGACACAGTCTCG	SACAGICICG
1726	GTGTGG	GTGTGG	GTGTGG	GTGTGG	GTGTGG	GTGTGG	1816	GCGCA	GCGCAC	GCGCAC		GCGCAG	GCGCAG	1906		
1711 1725	TCCGAAGCTGC	GGCCTCCGAAGCTGC					1801 1815	AGCTCTGGGAGGCAG GCGCAGTGCCCCT	AGCTCTGGGAGGCAG	AGCTCTGGGAGGCAG		AGCTCTGGGAGGCAG	AGCTCTGGGAGGCAG GCGCAGTGCCCCCT	1891 1905	GTATGTTTGTTTGTT	GTATGTTTGTTTGTT
·	NOC2 G	)		1,02	rc3	LC4		NOC2	NI.1		LC2	LC3	1 0 4		1 NOC2 G	
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1980	TTTGACACAGTCTCG CTTTGTTGCCCAGGC TGGGGTGCAGTGGCA CGATCGCGGCTCACT GCAACCTCCACCTCC	CTTTGTTGCCCAGG	TTTGACACAGTCTCG	GTATGTTTGTTTGTT	6 LC4
1914	TITGACACAGICICG CITIGITGCCCAGGC IGGGGTGCAGIGGCA CGAICGCGGCTCACT GCAACCICCACTICC	CTTTGTTGCCCAGG	TTTGACACAGTCTCG	GTATGTTTGTTTGTT	5 LC3
T 0 0 0	TTTGACACAGTCTCG CTTTGTTGCCCAGGC TGGGGTGCAGTGGCA CGATCGCGGCTCACT GCAACCTCACTIC	CTTTGTTGCCCAGGC	TTTGACACAGTCTCG	GTATGTTTGTT	4 LC2
1794	TITGACACAGICICG CTTIGITGCCCAGGC TGGGGTGCAGTGGCA CGATCGCGGCTCACT GCAACCTCCACCTCC	CTTTGTTGCCCAGG	TTTGACACAGTCTCG	GIATGTTTGTT	3 LC1

	1739	1797	1884	1950	2004	2070
056 2070	ACCACACCAGTTAA TTTTTGTATTTTAG	TTTTTGTATTTTAG	ACCACACCCAGTTAA TTTTTGTATTTTAG	ACCACACCCAGTTAA TTTTTGTATTTTAG	ACCACACCCAGTTAA TTTTTGTATTTTAG	ACCACACCCAGTTAA TTTTTGTATTTTAG
1 2055 2056	ACACCCAGTTAA T	ACCACACCCAGTTAA T	ACACCCAGTTAA T'	ACACCCAGTTAA T'	ACACCCAGTTAA T'	ACACCCAGTTAA T
2040 2041						
2025 2026	GA TTACAG	GA TTACAG	GA TTACAG	GA TTACAG	GA TTACAG	GA TTACAG
	CCTGAGTAGGTGGGA TTACAGATGCCCGCC	ctgágtaggtgg	CTGAGTAGGTGG	CCTGAGTAGGTGGGA TTACAGATGCCCGCC	CCTGAGTAGGTGG	CCTGAGTAGGTGG
6 2010 2011		CTCTCACCTCAGCCT CCTGAGTAGGTGGGA TTACAGATGCCCGCC	CTCTCACCTCAGCCT CCTGAGTAGGTGGGA TTACAGATGCCCGCC	CTCTCACCTCAGCCT	CTCTCACCTCAGCCT CCTGAGTAGGTGGGA TTACAGATGCCCGCC	rcacctcagcct
1995 1996	NOC2 CGGGCTCAAGCGATT CTCTCACCTCAGCCT	CGGGCTCAAGCGATT CTC1	CGGGCTCAAGCGATT CTC	CGGGCTCAAGCGATT CTC	CGGGCTCAAGCGATT CTC	CGGGCTCAAGCGATT CTCTCACCTCAGCCT CCTGAGTAGGTGGGA TTACAGATGCCCGCC
1981	1 NOC2 CGG	2 NL1 CGG	3 LC1 CGG	4 LC2 CGG	5 LC3 CGG	6 LC4 CGG



2094	2160		1919	1977	4	2130	2184	2250		2009	2067		2220	2274	2340
CCCAAAGTGCTGGGA	CCCAAAGTGCTGGGA 2	2236 2250		AGCCTGTCTTCAGCT	AGCCTGTCTTCAGCT			AGCCTGTCTTCAGCT	2326 2340	GGCACGTGGCTCCC	GGGCACGTGGCTCCC	GGCACGTGGCTCCC		GGCACGTGGCTCCC	GGCACGTGGCTCCC
CGCCCGCCTCGGCCT CC	CGCCCGCCTCGGCCT CC	2220 2221 2235 2	GCCTGGTTTTTGCTC AGCCTGTCTTCAGCT	GCCTGGTTTTTGCTC AC	GCCTGGTTTTTGCTC A(	GCCTGGTTTTTGCTC AGCCTGTCTTCAGCT	GCCTGGTTTTTGCTC AGCCTGTCTTCAGCT	GCCTGGTTTTTGCTC A	2310 2311 2325 2326	GIGCAICCCCAGCCA GGGCACGIGGCICCC	GTGCATCCCCAGCCA	GTGCATCCCCAGCCA GGGCACGTGGCTCCC	GTGCATCCCCAGCCA GGGCACGTGGCTCCC	GTGCATCCCCAGCCA GGGCACGTGGCTCCC	GIGCAICCCCAGCCA GGGCACGIGGCICCC
		2205 2206 2220	ATTAGGTTTCTTTGA ATCCCCTCATGGCCT	ATCCCCTCATGGCCT	ATCCCCTCATGGCCT	ATCCCCTCATGGCCT	ATCCCCTCATGGCCT	ATCCCCTCATGGCCT	2296	AAGAGCAGCGTTCAG	AAGAGCAGCGTTCAG	TGAACTCACTTGCTG AAGAGCAGCGTTCAG	AAGAGCAGCGTTCAG	AAGAGCAGCGTTCAG	AAGAGCAGCGTTCAG
CTGGTCTTGAACTCC	CTGGTCTTGAACTCC	2191 2205	ATTAGGTTTCTTTGA	ATTAGGTTTCTTTGA	ATTAGGTTTCTTTGA ATCCCCTCATGGCCT	ATTAGGTTTCTTTGA ATCCCCTCATGGCCT	ATTAGGTTTCTTTGA	ATTAGGTTTCTTTGA ATCCCCTCATGGCCT	2281 2295	TGAACTCACTTGCTG	TGAACTCACTTGCTG	TGAACTCACTTGCTG	TGAACTCACTTGCTG	TGAACTCACTTGCTG	TGAACTCACTTGCTG
TCCATGTTGGCCAGG	TCCATGTTGGCCAGG	2176 2190	ACCGCACCCAATCCT	ACCGCACCCAATCCT	ACCGCACCCAATCCT	ACCGCACCCAATCCT	ACCGCACCCAATCCT	TTACAGGTGTGAGCC ACCGCACCCAATCCT	2266 2280	CTCTGGTGGATGCTA	TGAGGAGCTGGGAAG CTCTGGTGGATGCTA TGAACTCACTTGCTG AAGAGAGCAGCGTTCAG	CTCTGGTGGATGCTA	TGAGGAGCTGGGAAG CTCTGGTGGATGCTA TGAACTCACTTGCTG AAGAGCAGCGTTCAG	TGAGGAGCTGGGAAG CTCTGGTGGATGCTA TGAACTCACTTGCTG AAGAGCAGCGTTCAG	TONCARCARGANG CHOTGGTGGATGCTA TGAACTCACTTGCTG AAGAGCAGCGTTCAG
AAGAGATGGGGTTTC TCCATGTTGGCCAGG CTGGTCTTGAACTCC TGGTCTCAAGTGATC	AAGAGATGGGGTTTC TCCATGTTGGCCAGG CTGGTCTTGAACTCC TGGTCTCAAGTGATC	2161 2175	TTACAGGTGTGAGCC ACCGCACCCAATCCT	TTACAGGTGTGAGCC ACCGCACCCAATCCT ATTAGGTTTTCTTTGA ATCCCCTCATGGCCT	TTACAGGTGTGAGCC ACCGCACCCAATCCT	TTACAGGTGTGAGCC	TTACAGGTGTGAGCC ACCGCACCCAATCCT	TTACAGGTGTGAGCC	2251 2265	NOC2 TGAGGAGCTGGAAG CTCTGGTGGATGCTA TGAACTCACTTGCTG AAGAGCAGCGTTCAG	TGAGGAGCTGGGAAG	TGAGGAGCTGGGAAG	TGAGGAGCTGGGAAG	TGAGGAGCTGGGAAG	かななかかいかなかがなかか
5 LÇ3	LC4		1 NOC2		3 LC1	4 LC2	5 LC3	6 LC4		1 NOC2	2 NL1		4 LC2	5 LC3	ج - ب
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	2099	2157	2244		2364	2430		2189	2247	2334	2400	2454	Š	
2430	AAAACCCTT	AAAACCCTT	TTCTGGAAAACCCTT	TTCTGGAAAACCCTT	TTCTGGAAAACCCTT	AAACCCTT	2520	TCCTGGGTC	TCCTGGGTC	CCGGGTTCCTGGGTC	TCCTGGGTC	TCCTGGGTC	CCGGGTTCCTGGGTC	
2416	TTCTGG	TTCTGG/	TTCTGGA	TTCTGGA	TTCTGGA	TTCTGGA	2506	CCGGGT	CCGGGT	CCGGGT	CCGGGT	CCGGGT		
2415	AGTATGGGCAAATGC TTCTGGAAAACCCTT	GGCAAATGC	AGTATGGGCAAATGC	AGTATGGGCAAATGC	AGTATGGGCAAATGC	AGTATGGGCAAATGC TTCTGGAAAACCCTT	2505	CTCCTGCCCCAAACC CCGGGTTCCTGGGTC	CTCCTGCCCCAAACC CCGGGTTCCTGGGTC	CTCCTGCCCCAAACC	CTCCTGCCCCAAACC CCGGGTTCCTGGGTC	CICCIGCCCCAAACC CCGGGTICCTGGGTC	GCCCCAAACC	
2401		AGTATG		- 1		AGTATG	2490 2491		CTCCT	CTCCT			CTCCT	
2400	rcattcag	rcattcag	rcattcag	AAATACTTCATTCAG	CATTCAG	CATTCAG	249	CTTCCTGC	TCCCATCCTTCCTGC	CTTCCTGC	CTTCCTGC	TCCCATCCTTCCTGC	CTTCCTGC	
2386	AAATACT'	AAATACTI	AAATACTI	AAATACT	AAATACTI	AAATACTI	5 2476	TCCCATC	TCCCATC	TCCCATC	TCCCATC	TCCCATC	TCCCATC	
2385	TTTGGCTTGGCATGA AAATACTTCATTCAG	TTTGGCTTGGCATGA AAATACTTCATTCAG AGTATGGGCAAATGC TTCTGGAAAACCCTT	TTTGGCTTGGCATGA AAATACTTCATTCAG	CTTGGCATGA	TTTGGCTTGGCATGA AAATACTTCATTCAG	TTTGGCTTGGCATGA AAATACTTCATTCAG	2475	TCGGTGATCACACCC TCCCATCCTTCCTGC	TCGGTGATCACACCC	TCGGTGATCACACCC TCCCATCCTTCCTGC	TCGGTGATCACACC TCCCATCCTTCCTGC	TCGGTGATCACACCC	TCGGTGATCACACCC TCCCATCCTTCCTGC CTCCTGCCCCAAACC	
2371	TTTGG			TTTGG	TTTGG		) 2461	TCGGT						
2370	CTTCAGGAGG	CTTCAGGAGG	CTTCAGGAGG	CTTCAGGAGG	CTTCTCTCAGGAGG	CTTCAGGAGG	2460	TGTGTGTGTG	TGTGTGTGTG	TGTGTGTGTG	TGTGTGTGTG	TGTGTGTGT	TGTGTGTGTG	
2356	CTTCT	CTTCT	CTTCT	CTTCT	CTTCT	CTTCT	2446	ACGTG	ACGTG	ACGTG	ACGTG	ACGTG	ACGTG	
2341 2355	TCAGCCATGAATTCA CTTCT	TCAGCCATGAATTCA CTTCTTCAGGAGG	TCAGCCATGAATTCA CTTCTCTTCAGGAGG	TCAGCCATGAATTCA CTTCTTCAGGAGG TTTGGCTTGGC	TCAGCCATGAATTCA		2445	שטשטשטט	CCCTGAAGAGAGA ACGTGTGTGTGTGTG	CCCICICA AGAGAGA ACGTGTGTGTGTGTG	CCCT CLARGAGAGA ACGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT	CCCTGAAGAGAGA ACGTGTGTGTGTG	CCCTGAAGAGAGA ACGTGTGTGTGTGTG	
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2337 CCTGGGCCCCCACCA TTCACTTTTTGTCCT TGCTGGCAAACA GTAAAGAAACTCACT CCTGGGCCCCCACCA TTCACTTTTTGTCCT TGCTGGCAAACA GTAAAGAAACTCACT 1 NOC2 TGGAAGGGCCTTCTC TCCAAGCTGGGAGCT 2 NL1 TGGAAGGGCCTTCTC TCCAAGCTGGGAGCT

9	MRRNVMGN	R LVERLE	DVLEQQRIG	IQ RAERI	HLSPAEVEAILQVIQ RAERLDVLEQQRIGR LVERLETMRRNVMGN		WSVHTYQTEKQRRKQ		PNDRQLALRAKLQTG		MADTIFGSGNDQWVC		3 LC1
9	MRRNVMGN	R LVERLEI	DVLEQQRIC	IQ RAERI	HLSPAEVEAILQVIQ RAERLDVLEQQRIGR LVERLETMRRNVMGN	O HLSI	PNDRQLALRAKLQTG WSVHTYQTEKQRRKQ	G WSVH	ALRAKLQT		MADTIFGSGNDQWVC		2 NL1
<u>y</u>	FMRRNVMGN	3R LVERLE	DVLEQQRIC	IQ RAERI	PAEVEAILQV	Q HLS	PNDRQLALRAKLQTG WSVHTYQTEKQRRKQ HLSPAEVEAILQVIQ RAERLDVLEQQRIGR LVERLETMRRNVMGN	G WSVF	LALRAKLQT		MADTIFGSGNDQWVC		1 NOC2
	06	75 76		60 61		45 46	•	30 31	,	15 16	H	Ţ	
												7	Fig.
					2658	AAA	TATGCTTCAGAATTA AAACAATGAAGATTA AAA	AAACF	FCAGAATTA	TATGCT'	TTCCCTGTGGCACGT	TTCCCTG1	6 LC4
					2592	AAA	TATGCTTCAGAATTA AAACAATGAAGATTA	AAACA	<b>TCAGAATTA</b>	TATGCT	TTCCCTGTGGCACGT	TTCCCTG1	5 LC3
					2538	AAA	TATGCTTCAGAATTA AAACAATGAAGATTA	AAACA	CAGAATTA	TATGCT1	TTCCCTGTGGCACGT	TTCCCTGI	4 LC2
					2472	AAA	TATGCTTCAGAATTA AAACAATGAAGATTA	AAACA	CAGAATTA	TATGCT1		TTCCCTGTGGCACGT	3 LC1
					2385	AAA	TATGCTTCAGAATTA AAACAATGAAGATTA	AAACA	CAGAATTA	TATGCT1		TTCCCTGTGGCACGT	2 NL1
					2327	AAA	AAACAATGAAGATTA		TATGCTTCAGAATTA	TATGCT	TTCCCTGTGGCACGT		1 NOC2
						2656	2655	2641	2640	2626	2625	2611	
2610	ACTCACT	GTAAAGAA	TGGCAAACA	r TGCTGC	STTTTTGTCCI	TTCAC	CCTGGGCCCCCACCA TTCACTTTTGTCCT TGCTGGCAAACA GTAAAGAAACTCACT		TCCAAGCTGGGAGCT	TCCAAGO		TGGAAGGGCCTTCTC	6 LC4
2544	ACTCACT	GTAAAGAA	TGGCAAACA	r recrec	TTTTTGTCCT	TTCAC	CCTGGGCCCCCACCA TTCACTTTTGTCCT TGCTGGCAAACA GTAAAGAAACTCACT		TCCAAGCTGGGAGCT	TCCAAGO		TGGAAGGGCCTTCTC	5 LC3
2490	ACTCACT	TGCTGCTGGCAAACA GTAAAGAAACTCACT	TGGCAAACA	TGCTGC	TTTTTGTCCT	TTCAC	TCCAAGCTGGGAGCT CCTGGGCCCCCCACCA TTCACTTTTGTCCT	CCTGG	TGGGAGCT	ICCAAGO		TGGAAGGGCCTTCTC	- 4 LC2
2424	ACTCACT	GTAAAGAA	TGGCAAACA	TGCTGC	TTTTTGTCCT	TTCAC	TCCAAGCTGGGAGCT CCTGGGCCCCCACCA TTCACTTTTTGTCCT TGCTGGCAAACA GTAAAGAAACTCACT	CCTGG	TGGGAGCT	rccaagg	CCTTCTC	ŢĠĠĄĄĠĠĠĊĊŢŢĊŢĊ	3 LC1

ω	06	8				087	151	180	σ		180	86	0	100	241		270	210	128	) ] 
MRRNVMGN	LVERLETMRRNVMGN	MRRNVMGN			166 180	LKTPGRADDPHFRPL	LKTPGRADEPQFRPW	LKTPGRADDPHFRPL		LKT PGRADDEHE RF L	LKT PGRADDPHERPL	LKTPGRADDPHFRPL	256 270	PPGHLSGCQSSLASG	PAGHI.FGLOSSLASG		PAGHLFGLQSSLASG	; ; ; ; ; ; ; ; ; ; ; ;		 
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	RAERLDVLEQQRIGR L	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			151 165	SGAWFYKGLPKYILP I	SGAWFYKGLPKYILP L	SGAWEYKGLPKYILP I		SGAWFYKGLPKYILP I	SGAWFYKGLPKYILP	SGAWFYKGLPKYILP	241 255	ESGGSVEAPRMGFTH		ESGGSVEAFNIGE 1X	ESGGSVEAPRMGFTQ	1 1 1 1		 
	YLSPAEVEAILQVIQ F		, 		136 150	WLCKICSEQREVWKR	VWKR	WIGKIGSFOREVWKR		WLCKICSEQREVWKR	WLCKICSEQREVWKR	WLCKICSEQREVWKR	226 240	PSTGVRDRKGDKPWK		PSTGVRDRKGDKPWK	PSTGVRDRKGDKPWK		   1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
- 1 1 1 1 1 1 1	WEVUTVOTEKORRKO		1		121 135	TKCGIEASPGQKRPL	                 		TRUGIERSFUCTORE	TKCGIEASPGQKRPL	TKCGIEASPGQKRPL	TKCGIEASPGQKRPL	225			DSDSDLSSSSLEDRL	DSDSDLSSSSLEDRL		1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
-		PNUKQLALKANLQIG		<i>A</i> :	106 120	SVFCKDCRK			GSSSVFCKDCRKKVC	GSSSVECKDCRKKVC	GSSVFCKDCRKKVC	GSSSVFCKDCRKKVC	196			RIYTWARGRVVSSDS	RIYTWARGRVVSSDS		RIYTWARGRVVGRKC	RIYTWARGRVVGRKC
•		MADTIFGSGNDQWVC	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		105				GLSQCLLCGEVLGFL	GLSOCI.I.CGEVLGEL		Graden Caracian Caracian		T 8 T	PTEPAEREPRSSETS	PTEPAEREPRSSETS	מחשטטמטמטמטמטמטמטמטמטמטמטמטמטמטמטמטמטמטמ	FIEFAGNETNOOFTO	PTEPAEREPRSSETS	PTEPAEREPRSSETS
	4 LC2	5 LC3	6 LC4					2 NLI	3 LC1	C		5 LC 3			1 NOC2	2 NL1		3 LCI	4 LC3	5 LC4

DSDSDLSSSSLEDRL PSTGVRDRKGDKPWK ESGGSVEAPRMGFTQ PAGHLFGLQSSLASG PTEPAEREPRSSETS RIYTWARGRVVSSDS

6 LC2

1 NOC2 ETGTGSADPPGGPR 2 NL1 ETGTGSADPPGGGTG SADPPGGPR 3 LC1 ETGTGSADPPGGGTG SADPPGGPR 4 LC2 ETGTGSADPPGGGTG SADPPGGPR 5 LC3		PRPGLTRR APVKDTPGRAPAADA APAGPSSCLG 313	ETGTGSADPPGGGTG SADPPGGPRPGLTRR APVKDTPGRAPAADA APAGPSSCLG 296	ADPPGGPRPGLTRR APVKDTPGRAPAADA APAGPSSCLG 325	ADPPGGPRPGLTRR APVKDTPGRAPAADA APAGPSSCLG 243	210	128
1 NOC2 ETGTGSADPPGG 2 NL1 ETGTGSADPPGGGTG S 3 LC1 ETGTGSADPPGGGTG S 4 LC2 ETGTGSADPPGGGTG S 5 LC3		PRPGLTR	ADPPGGPRPGLTRI	SADPPGGPRPGLTR	SADPPGGPRPGLTR	             	_
1 NOC2 2 NL1 3 LC1 4 LC2 5 LC3	271 285 289	ETGTGSADPPGG	ETGTGSADPPGGGTG S	ETGTGSADPPGGGTG S		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
	. 4	1 NOC2				5 LC3	

6 LC4